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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/800,528

03/15/2004

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EXAMINER

RADKIEWICZ, JARED

ART UNIT

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2624

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/800,528	Applicant(s) OWEN, JAMES E.	
	Examiner Jared W. Radkiewicz	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/18/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Double Patenting

1. Applicant is advised that should claim 19 be found allowable, claim 23 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1, 6, 10, and 14** are rejected under 35 U.S.C. 102(b) as being anticipated by Morley et al. (US 2002/0186765 A1).

Regarding **claim 1**, Morley teaches a method for scaling a first bitmap from a first size to a second size ("decimating a digital image", Paragraph 9), the method comprising:

accessing a first bitmap ("image", Paragraph 32);

iterating through the first bitmap and performing the following until no more size reductions are needed to scale the first bitmap to the second size (The feedback loops in figure 2 demonstrate the need to iterate through blocks until the entire image is processed):

identifying a group of pixels from the first bitmap ("Read a 16x16 Block"
202, Figure 2);

identifying a unique pixel or unique pixels in the group of pixels (Variance computations 204, 214, and 224 are used to decide which parts of the block to decimate, Figure 2); and

copying one or more pixels including the unique pixel or the unique pixels from the group of pixels to a second bitmap, wherein one or more pixels are not copied to the second bitmap and are not the unique pixel or pixels (Steps 208, 218, and 228 write blocks of data based on the variance computations 204, 214, and 224, Figure 2).

Regarding **claims 6**, Morley teaches the method of claim 1, wherein the first bitmap and the second bitmap are different bitmaps, and wherein the second bitmap comprises copies of pixels from the first bitmap that have not been altered or transformed (Figure 1 has distinctly separate input and output images).

Regarding **claim 10**, Morley teaches a computer device configured to execute the method of claim 1 (Paragraph 66).

Regarding **claim 14**, Morley teaches a computer readable medium that performs the method of claim 1 ("The software may reside in RAM memory, flash memory, ROM memory", Paragraph 66).

Claim Rejections - 35 USC § 103

4. **Claims 2, 4, 11, 12, 13, 15, 19, 23 and 24** are rejected under 35 U.S.C. 102(b) as being anticipated by Morley et al. (US 2002/0186765 A1) in combination with Suzuki et al. (US 5,754,698).

Regarding **claims 2, 11, and 15**, Morley teaches the method of claim 1,

Morley does not teach claim 1 further comprising comparing each pixel in the group of pixels to a comparison set in order to identify the unique pixel or pixels.

Suzuki teaches claim 1 further comprising comparing each pixel in the group of pixels to a comparison set in order to identify the unique pixel or pixels (the "Sub-sampling patterns" are a method of determining which pixels to decimate based on a comparison, Suzuki Figure 15).

It would have been obvious to one of ordinary skill in the art to apply the sub sampling patterns of Suzuki to the decimation method of Morley as one of many "decision[s] to decimate" (Morley Paragraph 46).

Regarding **claim 4**, Morley and Suzuki teach the method of claim 2, wherein the comparison set is not in the group of pixels (The patterns of Suzuki Figure 15 are not included in the original image).

Regarding **claims 12, 19, and 23**, Morley and Suzuki teach the method of claim 1, wherein the first bitmap and the second bitmap are different bitmaps, and wherein the

second bitmap comprises copies of pixels from the first bitmap that have not been altered or transformed (Figure 1 has distinctly separate input and output images).

Regarding **claim 13**, Morley and Suzuki teach the device of claim 12, wherein the method implemented by the executable instructions further comprises saving the second bitmap (Morley paragraph 66 gives several examples of where the bitmap could be stored).

Regarding **claim 24**, Morley and Suzuki teach claim 15, wherein the first bitmap and the second bitmap are the same bitmap for in-place scaling (Morley Figures 4A-4C show in place decimation).

5. Claims **3, 5, 7, 8, 9, 16-18, and 20-22** are rejected under Morley et al. (US 2002/0186765 A1) and Suzuki et al. (US 5,754,698) in combination with Scott et al. (US 5,097,518).

Regarding **claims 3 and 16**, Morley and Suzuki teach claims 2 and 15, respectively.

Morley and Suzuki do not teach the invention wherein the unique pixel or pixels comprises the most unique pixel or pixels.

Scott teaches an image scaling device wherein individual pixels are selected for decimation and those pixels are written to the output (Scott Figure 9).

It would have been obvious at the time of invention to one of ordinary skill in the art to use the chosen pixels in the set written to the output as taught by Scott in the scaling method of Morley and Suzuki because those pixels have already been designated as containing important image data by the decimation decision section of Morley (Morley Figure 2 shows decimation decisions based on, for example, variance).

Regarding **claim 5**, Morley and Suzuki teach claim 2.

Morley and Suzuki do not teach the method wherein the group of pixels comprises the comparison set.

Scott teaches comparing a group of pixels to an adjacent group of pixels to make decimation decisions (Scott Figure 8 "Next Pixel Position Register" in the "Horizontal Reduction Scaler").

It would have been obvious at the time of invention to one of ordinary skill in the art to use the next pixels to make decimation decisions as taught by Scott in the image scaling method of Morley and Suzuki to determine "the level of detail within the block" (Morley Paragraph 46).

Regarding **claims 7 and 20**, Morley and Suzuki teach claims 2 and 19, respectively.

Morley and Suzuki do not teach claims 2 and 19 wherein the comparison set is adjacent to the group of pixels.

Scott teaches comparing a group of pixels to an adjacent group of pixels to make decimation decisions (Scott Figure 8 "Next Pixel Position Register" in the "Horizontal Reduction Scaler").

It would have been obvious at the time of invention to one of ordinary skill in the art to use an adjacent pixel block as taught by Scott to make decimation decisions in the method of Morley and Suzuki because adjacent blocks of pixels to determine local image data similar to "the level of detail within the block" (Morley Paragraph 46), but in the adjacent block.

Regarding **claims 8 and 21**, Morley, Suzuki, and Scott teach the method wherein the comparison set comprises one pixel (Scott Figure 8 "Next Pixel Position Register" in the "Horizontal Reduction Scaler" operates on single pixels).

Regarding **claim 9**, Morley, Suzuki, and Scott teach claim 7, wherein the first bitmap and the second bitmap are the same bitmap for in-place scaling (Morley Figures 4A-4C show in place decimation).

Regarding **claim 17**, Morley, Suzuki, and Scott teach a comparison set not in the group of pixels (The patterns of Suzuki Figure 15 are not included in the original image).

Regarding **claim 18**, Morley, Suzuki, and Scott teach claim 16.

Morley, Suzuki, and Scott as applied to claim 16 do not teach the computer medium wherein the group of pixels comprises the comparison set.

Scott teaches comparing a group of pixels to an adjacent group of pixels to make decimation decisions (Scott Figure 8 "Next Pixel Position Register" in the "Horizontal Reduction Scaler").

It would have been obvious at the time of invention to one of ordinary skill in the art to use an adjacent pixel block as taught by Scott to make decimation decisions in the method of Morley and Suzuki because adjacent blocks of pixels to determine local image data similar to "the level of detail within the block" (Morley Paragraph 46), but in the adjacent block.

Regarding **claim 22**, Morley, Suzuki, and Scott teach a comparison set comprising a plurality of pixels (Morley Figure 2 shows scaling operations based on blocks).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jared W. Radkiewicz whose telephone number is (571) 270-1577. The examiner can normally be reached on 8:00 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian P. Werner can be reached on (571) 272-7401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JWR

/Brian P. Werner/
Supervisory Patent Examiner (SPE), Art Unit 2624